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NTE2354

Silicon NPN Transistor

High Voltage Horizontal Output for High Definition CRT

Applications:

- High-definition color display horizontal deflection output

Features:

- Fast speed: $t_f = 100\text{ns}$ Typ
- High breakdown voltage: $V_{CBO} = 1500\text{V}$
- High reliability

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Collector-to-Base Voltage, V_{CBO}	1500V
Collector-to-Emitter Voltage, V_{CEO}	800V
Emitter-to-Base Voltage, V_{EBO}	6V
Collector Current, I_C	10A
Peak Collector Current, i_{cp}	25A
Collector Dissipation ($T_C = +25^\circ\text{C}$), P_C	150W
Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	-55° to +150°C

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CES}	$V_{CE} = 1500\text{V}, R_{BE} = 0$	-	-	1.0	mA
Collector Sustain Voltage	$V_{CEO(sus)}$	$I_C = 100\text{mA}, I_B = 0$	800	-	-	V
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4\text{V}, I_C = 0$	-	-	1.0	mA
Saturation Voltage Collector-to-Emitter	$V_{CE(sat)}$	$I_C = 8\text{A}, I_B = 2.0\text{A}$	-	-	5.0	V
Saturation Voltage Base-to-Emitter	$V_{BE(sat)}$	$I_C = 8\text{A}, I_B = 2.0\text{A}$	-	-	1.5	V
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}, I_C = 1.0\text{A}$	8	-	-	-
Storage Time	t_{stg}	$I_C = 6\text{A}, I_{B1} = 1.2\text{A}, I_{B2} = -2.4\text{A}$	-	-	3.0	μs
Fall Time	t_f	$I_C = 6\text{A}, I_{B1} = 1.2\text{A}, I_{B2} = -2.4\text{A}$	-	0.1	0.2	μs

